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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/559,782

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5035-226US/P32,058 USA

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7590

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EXAMINER

HUSSAIN, IMAD

ART UNIT

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2151

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/559,782	MCDOWALL ET AL.	
	Examiner	Art Unit	
	IMAD HUSSAIN	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment filed 19 February 2008 has been received and made of record.
2. Claims 1 has been amended. Claims 1-22 are pending in application 10/559782.

Response to Arguments

3. Applicant's arguments filed 19 February 2008 have been fully considered but they are not persuasive. Applicant argues that:

- a. the "published name" of the instant application is very different from the "transport address" of Srinivasan as the published name does not include the port number while the transport address does include the port number.

In response to Applicant's argument, Examiner must respectfully note that Applicant has apparently misinterpreted Examiner's reference and/or mapping. Examiner agrees that the "published name" of the instant application is very different from the "transport address" of Srinivasan. Examiner's mapping was intended to show that the "published name" of the instant application corresponds to the "RPC program number" (which is well-known to be mapped to a published name in a UNIX system's /etc/rpc file). Srinivasan teaches using the RPC program number (and version number) to query a lookup service ("service broker") in order to obtain a transport address ("connection point address") [Srinivasan: Page 2 Paragraph 1].

- b. Garfinkel does not teach automatic start-up of the service when the request is received.

In response to Applicant's argument, Examiner must point out that Garfinkel does in fact teach automatic start-up of services in response to received requests via `inetd` (which may be construed to be part of the "service broker") [Garfinkel: Page 4, "Carefully review the RPC services that are configured into your system for automatic start when the system boots, or for automatic dispatch from the `inetd` (see Chapter 17, TCP/IP Services)"]. Examiner has included additional information on `inetd` from chapter 17 of the Garfinkel reference with this office action.

- c. Venners does not teach "reverse naming" corresponding to uniquely identifying a service as being from a particular vendor.

In response to Applicant's argument, Examiner must point out that Venners clearly discloses a "reverse form" global naming scheme that identifies object types as being from a particular vendor [Venners: Page 8 Number 1, "Java objects come with a global naming scheme that's supposed to make all fully qualified names unique. IBM, for example, is responsible for making sure no two types in the *com.ibm* namespace have the same name, and it is not supposed to let the world see anything it made whose name doesn't start with "*com.ibm*" (or the reverse form of any other Internet domain name it controls)"].

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raj Srinivasan (*RFC 1833: Binding Protocols for ONC RPC Version 2*, hereafter Srinivasan) in view of Simson Garfinkel et al (*Practical UNIX & Internet Security*, hereafter Garfinkel) and in further view of Bill Venners (*Finding Services with the Jini Lookup Service*, hereafter Venners).

Regarding claim 1, Srinivasan discloses *a method of enabling a client, running on a first computing device that is connected to a second computing device, to use a service on that second computing device* [“client” and “remote procedure”, Page 14 Paragraph 1], *comprising the steps of:*

(a) *a service, installed on the second computing device, registering its published name [“transport address”] with a service broker [“lookup service”] on that second computing device* [Page 2 Paragraph 1];

(b) *the client sending a message to the service broker specifying the... service; wherein the published name [“RPC program number” and “version*

number”] *of the service* does not include *specifying the connection point address of that service* [Page 2 Paragraph 1].

Srinivasan does not explicitly disclose that *the service broker starts up the service*.

However, Garfinkel discloses that the service may be automatically started when the request is received [Garfinkel: Page 4, “Carefully review the RPC services that are configured into your system for automatic start when the system boots, or for automatic dispatch from the inetd (see Chapter 17, TCP/IP Services)”].

Srinivasan and Garfinkel are analogous art in the same field of endeavor as both deal with RPC and service registration. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the automatic process startup of Garfinkel for automatically starting processes in the system of Srinivasan. One of ordinary skill in the art would have been motivated to modify the system of Srinivasan with the automatic process startup of Garfinkel because in doing so, the system would allow for starting services on an on-demand basis.

Srinivasan-Garfinkel does not disclose that the client *specifies the name of the service* or that *the published name of the service conforms to a structured naming convention that uniquely identifies the service as a service from a particular vendor*.

However, Venners teaches that services are looked up by name and that service names [Venners: Page 7 Paragraph 6, “service... type names”], conform to a structured naming convention that uniquely identifies the service as a service from a particular vendor [Venners: Page 8 Number 1, “Java objects come with a global naming scheme that's supposed to make all fully qualified names unique. IBM, for example, is responsible for making sure no two types in the *com.ibm* namespace have the same name, and it is not supposed to let the world see anything it made whose name doesn't start with "*com.ibm*" (or the reverse form of any other Internet domain name it controls”)].

Srinivasan-Garfinkel and Venners are analogous art in the same field of endeavor as both deal with network service registrars. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the naming scheme of Venners for service identification in the system of Srinivasan-Garfinkel. One of ordinary skill in the art would have been motivated to modify the system of Srinivasan-Garfinkel with the naming scheme of Venners because in doing so, the system would allow for identification with greater meaning and uniqueness [Venners: Page 8 Paragraphs 2 and 5].

Regarding claim 2, Srinivasan-Garfinkel-Venners teach that *the structured naming convention uses reversed domain information* [Venners: Page 8 Paragraph 2 (Item 1)].

Regarding claim 3, Srinivasan-Garfinkel-Venners teach that *the service broker uses a single well-known port number address so that the client needs only this well known port number to send a message to the service broker* [Srinivasan: “well-known because it uses a fixed transport selector”, “port 111 over TCP and UDP”, Page 2 Paragraphs 1 and 3].

Regarding claim 4, Srinivasan-Garfinkel-Venners teach that *the service obtains a connection point and informs the service broker of the connection point address and the service broker then informs the client of the connection point address* [Srinivasan: Page 2 Paragraph 1].

Regarding claim 5, Srinivasan-Garfinkel-Venners teach that *the service broker informs the client of the connection point address and the client then uses that address in communicating directly with the server* [Srinivasan: Page 2 Paragraph 1].

Regarding claim 6, Srinivasan-Garfinkel-Venners teach that *the connection point address is a port number* [Srinivasan: Page 11 Paragraph 5 (Port Mapper Program Protocol) and Page 13 Paragraph 6 (PMAPPROC_GETPORT)].

Regarding claim 7, Srinivasan-Garfinkel-Venners teach that *if a service is required more than once, the server providing the service will not be re-started,*

but instead the service broker uses cached address information [Srinivasan: Page 9 Paragraphs 2-4 (the registration remains set until the program becomes unavailable)].

Regarding claim 8, Srinivasan-Garfinkel-Venners teach that *when services register with the service broker, they register a version number to 'indicate the version of the service that they are providing* [Srinivasan: Page 13 Paragraph 4 (PMAPPROC_SET)].

Regarding claim 9, Srinivasan-Garfinkel-Venners teach that *the client can request a specific version of a named service* [Srinivasan: Page 13 Paragraph 6 (PMAPPROC_GETPORT)].

Regarding claim 10, Srinivasan-Garfinkel-Venners teach that *the service broker enables multiple services* [Srinivasan: “remote programs”, Page 2 Paragraph 2] *installed on a single, second computing device* [Srinivasan: “resides at the same network address”, Page 2 Paragraph 1] *to serve one or more external clients that are computers connected by a remote link such as a network data connection.* [Srinivasan: “transport” Page 2 Paragraph 1].

Regarding claim 11, Srinivasan-Garfinkel-Venners teach that *the service broker provides authentication information such that only authenticated external clients can access services* [Garfinkel: Section 19.2.2 RPC Authentication].

Regarding claims 12-22, the claims comprise substantially the same limitations as claims 1-11, respectively. The same rationale for rejection is applicable.

Conclusion

6. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the text of the passage taught by the prior art or disclosed by the examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IMAD HUSSAIN whose telephone number is (571) 270-3628. The examiner can normally be reached on Monday through Friday from 0800 to 1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2100

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IH/

Imad Hussain

Examiner

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2151